

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. An alarm control panel for a security system, said alarm control panel including a communication arrangement for communicating and receiving alarm signals from a series of security detectors, a processing arrangement which processes the signals received from the security detectors and based thereon determining when an alarm condition exists, said alarm control panel further including a circuit for detecting the presence of transient electromagnetic signals of a magnitude likely to cause some security detectors to falsely produce a signal indicative of an alarm condition, said processing arrangement temporarily interrupting the determination of an alarm condition when said circuit arrangement detects the presence of such a transient electromagnetic signal.
2. An alarm control panel as claimed in claim 1 wherein said processing arrangement includes a timing arrangement that defines a time duration during which identification alarm conditions are not processed.
3. An alarm control panel as claimed in claim 1 wherein said processing arrangement includes additional logic for determining when sensed transient electromagnetic signals are of a repetition or duration not normally associated with naturally occurring transient electromagnetic signals and based thereon determines an alarm condition exists.
4. An alarm control panel as claimed in claim 1 wherein said circuit arrangement detects the presence of a transient electromagnetic signal by detecting transient voltages between earth ground and circuit ground.
5. An alarm control panel as claimed in claim 1 wherein said processing arrangement upon detecting the

presence of a transient electromagnetic signal ignores for a predetermined time period received security detector signals.

6. An alarm control panel as claimed in claim 1 wherein said circuit arrangement compares a signal produced by a first circuit branch designed to be responsive to received transient electromagnetic signals and a second circuit branch designed to identify transient electromagnetic signals on an earth ground of said alarm control panel.

7. An alarm control panel as claimed in claim 6 wherein said circuit arrangement produces an output signal when both circuit branches detect a transient electromagnetic signal indicative of lightning.

8. In a security alarm system having an alarm panel in combination with a series of security detectors, said alarm control panel including a communication arrangement for communicating and receiving alarm signals from any of said series of security detectors and a processing arrangement which processes the signals received from said security detectors and based thereon determining when an alarm condition exists, said alarm control panel further including a circuit for detecting the presence of transient electromagnetic signals of a magnitude likely to cause some security detectors to falsely produce a signal indicative of an alarm condition, said processing arrangement temporarily interrupting the determination of an alarm condition when said circuit arrangement detects the presence of said transient electromagnetic signal.

9. In a security alarm system as claimed in claim 8 wherein said circuit identifies the presence of electromagnetic signals typical of lightning.

10. In a security alarm system as claimed in claim 9 wherein said processing arrangement interrupts the determination of an alarm condition by temporarily ignoring the signals received from said security detectors.

11. A method of reducing false alarms in a security alarm system having an alarm panel that processes signals received from a series of remote sensors, said method comprising the steps of using a receiving circuit of said alarm control panel to detect an electromagnetic signal indicative of lightning; and upon detection of an electromagnetic signal indicative of lightning, interrupting normal operation of said security alarm system by temporarily ignoring any signals received from the series of remote sensors.

12. A method as claimed in claim 11 wherein said step of temporarily ignoring any signals received from the series of remote sensors has a predetermined time period whereafter normal operation of said security alarm system continues.

13. A method as claimed in claim 11 wherein said step of detecting an electromagnetic signal indicative of lightning using said alarm control panel includes a comparison of transient voltages associated with earth ground of said alarm control panel and transient voltages associated with a circuit ground of said alarm control panel.

14. A method as claimed in claim 13 including providing in said alarm control panel a circuit which acts as a receiver for detecting transient voltages produced by lightning.

15. An alarm control panel comprising  
a signal processing arrangement,  
an alarm signal receiving arrangement providing  
received alarm signals to said signal processing  
arrangement,  
a detecting circuit responsive to the presence of  
naturally occurring transient signals and providing to  
said processing arrangement a caution signal when a  
transient signal is detected,  
said processing arrangement using the receipt of  
an alarm signal and any caution signal in the processing  
of each received alarm signal.
16. An alarm control panel as claimed in claim 15  
wherein said processing arrangement includes timing means  
for determining whether the receipt of an alarm signal is  
associated with the receipt of a caution signal.
17. An alarm control panel as claimed in claim 16  
wherein said processing arrangement processes each alarm  
signal by communicating with a remote monitoring station  
and reporting the receipt of the alarm signal and any  
associated caution signal.
18. An alarm control panel as claimed in claim 15  
wherein said processing arrangement, upon receipt of an  
alarm signal without receipt of a caution signal, reports  
the alarm signal to a remote monitoring station, and said  
processing arrangement, upon receipt of an alarm signal  
and a caution signal, ignores the step of reporting the  
received alarm signal to said remote security station.
19. An alarm control panel as claimed in claim 16  
wherein said processing arrangement includes a selectable  
means for choosing a first option or a second option for  
processing received alarm signals and associated caution  
signals, said first option causing said processing  
arrangement to report alarm signals together with any

associated caution signals to a remote security monitoring station; said second option causing said processing arrangement to ignore the step of reporting of received alarm signals having associated caution signals as alarm signals to said remote security station.

20. An alarm control panel comprising
  - a signal processing arrangement,
  - an alarm signal receiving arrangement providing received alarm signals to said signal processing arrangement,
  - a detecting circuit responsive to the presence of naturally occurring transient signals in an operating environment associated with said control panel and providing to said processing arrangement a caution signal when a transient signal is detected, and wherein
  - said processing arrangement reports received alarm signals with any caution signals to a remote monitoring station.